

***FlyBy Math™* Alignment**
Alabama Course of Study: Mathematics
Adopted 2003

Algebra

Students will:

2. Analyze linear functions from their equations, slopes, and intercepts.

- Finding the slope of a line from its equation or by applying the slope formula
- Determining the equations of linear functions given two points, a point and the slope, tables of values, graphs, or ordered pairs
- Graphing two-variable linear equations and inequalities on the Cartesian plane

***FlyBy Math™* Activities**

--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

--Interpret the slope of a line in the context of a distance-rate-time problem.

8. Solve systems of linear equations and inequalities in two variables graphically or algebraically.

- Modeling real-world problems by developing and solving systems of linear equations and inequalities

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Represent distance, speed, and time relationships for constant speed cases using linear equations and a Cartesian coordinate system.

--Use graphs to compare airspace scenarios for both the same and different starting conditions and the same and different constant (fixed) rates.

Geometry

Students will:

10. Calculate length, midpoint, and slope of a line segment when given coordinates of its endpoints on the Cartesian plane.

- Deriving the distance, midpoint, and slope formulas

***FlyBy Math™* Activities**

--Interpret the slope of a line in the context of a distance-rate-time problem.